Kathryn A Davis

List of Publications by Year
in descending order

84 papers	3,436 citations	136940 32 h-index	189881 50 g-index
97 all docs	97 docs citations	97 times ranked	3474 citing authors

#	Article	IF	Citations
1	Closed-loop stimulation of temporal cortex rescues functional networks and improves memory. Nature Communications, 2018, 9, 365.	12.8	248
2	Direct Brain Stimulation Modulates Encoding States and Memory Performance in Humans. Current Biology, 2017, 27, 1251-1258.	3.9	207
3	Virtual Cortical Resection Reveals Push-Pull Network Control Preceding Seizure Evolution. Neuron, 2016, 91, 1170-1182.	8.1	185
4	Dynamic Network Drivers of Seizure Generation, Propagation and Termination in Human Neocortical Epilepsy. PLoS Computational Biology, 2015, 11, e1004608.	3.2	148
5	Lateralized hippocampal oscillations underlie distinct aspects of human spatial memory and navigation. Nature Communications, 2018, 9, 2423.	12.8	132
6	White Matter Network Architecture Guides Direct Electrical Stimulation through Optimal State Transitions. Cell Reports, 2019, 28, 2554-2566.e7.	6.4	104
7	A novel implanted device to wirelessly record and analyze continuous intracranial canine EEG. Epilepsy Research, 2011, 96, 116-122.	1.6	95
8	Virtual resection predicts surgical outcome for drug-resistant epilepsy. Brain, 2019, 142, 3892-3905.	7.6	93
9	Continuous EEG is associated with favorable hospitalization outcomes for critically ill patients. Neurology, 2019, 92, e9-e18.	1.1	91
10	Universal automated high frequency oscillation detector for real-time, long term EEG. Clinical Neurophysiology, 2016, 127, 1057-1066.	1.5	86
11	Interictal epileptiform discharges impair word recall in multiple brain areas. Epilepsia, 2017, 58, 373-380.	5.1	84
12	Evidence for verbal memory enhancement with electrical brain stimulation in the lateral temporal cortex. Brain, 2018, 141, 971-978.	7.6	80
13	Alzheimer-like amyloid and tau alterations associated with cognitive deficit in temporal lobe epilepsy. Brain, 2020, 143, 191-209.	7.6	74
14	The effects of direct brain stimulation in humans depend on frequency, amplitude, and white-matter proximity. Brain Stimulation, 2020, 13, 1183-1195.	1.6	73
15	Association of Piriform Cortex Resection With Surgical Outcomes in Patients With Temporal Lobe Epilepsy. JAMA Neurology, 2019, 76, 690.	9.0	69
16	Temporal Lobe Epilepsy Surgical Outcomes Can Be Inferred Based on Structural Connectome Hubs: A Machine Learning Study. Annals of Neurology, 2020, 88, 970-983.	5.3	68
17	MXene-infused bioelectronic interfaces for multiscale electrophysiology and stimulation. Science Translational Medicine, 2021, 13, eabf8629.	12.4	68
18	Electrical Stimulation in Hippocampus and Entorhinal Cortex Impairs Spatial and Temporal Memory. Journal of Neuroscience, 2018, 38, 4471-4481.	3.6	63

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19	Mapping the structural and functional network architecture of the medial temporal lobe using 7T MRI. Human Brain Mapping, 2018, 39, 851-865.	3.6	60
20	Spatial distribution of interictal spikes fluctuates over time and localizes seizure onset. Brain, 2020, 143, 554-569.	7.6	60
21	Mechanistic target of rapamycin complex 1 and 2 in human temporal lobe epilepsy. Annals of Neurology, 2018, 83, 311-327.	5.3	59
22	Characterizing the role of the structural connectome in seizure dynamics. Brain, 2019, 142, 1955-1972.	7.6	56
23	Electrophysiological Signatures of Spatial Boundaries in the Human Subiculum. Journal of Neuroscience, 2018, 38, 3265-3272.	3.6	55
24	Similar patterns of neural activity predict memory function during encoding and retrieval. NeuroImage, 2017, 155, 60-71.	4.2	52
25	7T Epilepsy Task Force Consensus Recommendations on the Use of 7T MRI in Clinical Practice. Neurology, 2021, 96, 327-341.	1.1	52
26	Neural activity reveals interactions between episodic and semantic memory systems during retrieval.. Journal of Experimental Psychology: General, 2019, 148, 1-12.	2.1	51
27	Glutamate weighted imaging contrast in gliomas with 7â€¯Tesla magnetic resonance imaging. NeuroImage: Clinical, 2019, 22, 101694.	2.7	50
28	Structural and functional asymmetry of medial temporal subregions in unilateral temporal lobe epilepsy: A 7T MRI study. Human Brain Mapping, 2019, 40, 2390-2398.	3.6	49
29	Functional control of electrophysiological network architecture using direct neurostimulation in humans. Network Neuroscience, 2019, 3, 848-877.	2.6	49
30	Mining continuous intracranial <scp>EEG</scp> in focal canine epilepsy: Relating interictal bursts to seizure onsets. Epilepsia, 2016, 57, 89-98.	5.1	46
31	Data integration: Combined imaging and electrophysiology data in the cloud. NeuroImage, 2016, 124, 1175-1181.	4.2	46
32	Recurring Functional Interactions Predict Network Architecture of Interictal and Ictal States in Neocortical Epilepsy. ENeuro, 2017, 4, ENEURO.0091-16.2017.	1.9	44
33	High interictal connectivity within the resection zone is associated with favorable post-surgical outcomes in focal epilepsy patients. NeuroImage: Clinical, 2019, 23, 101908.	2.7	41
34	Time-evolving controllability of effective connectivity networks during seizure progression. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	41
35	Electrical Stimulation Modulates High Î³ Activity and Human Memory Performance. ENeuro, 2018, 5, ENEURO.0369-17.2018.	1.9	41
36	Contextually Mediated Spontaneous Retrieval Is Specific to the Hippocampus. Current Biology, 2017, 27, 1074-1079.	3.9	29

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37	Normative intracranial EEG maps epileptogenic tissues in focal epilepsy. Brain, 2022, 145, 1949-1961.	7.6	29
38	An openâ€source automated platform for threeâ€dimensional visualization of subdural electrodes using CTâ€MRI coregistration. Epilepsia, 2014, 55, 2028-2037.	5.1	27
39	Quantitative EEG predicts outcomes in children after cardiac arrest. Neurology, 2019, 92, e2329-e2338.	1.1	27
40	Intracranial electroencephalographic biomarker predicts effective responsive neurostimulation for epilepsy prior to treatment. Epilepsia, 2022, 63, 652-662.	5.1	25
41	Readmission after seizure discharge in a nationally representative sample. Neurology, 2019, 92, .	1.1	23
42	Temporal behavior of seizures and interictal bursts in prolonged intracranial recordings from epileptic canines. Epilepsia, 2016, 57, 1949-1957.	5.1	22
43	Electrocorticography and stereo EEG provide distinct measures of brain connectivity: implications for network models. Brain Communications, 2021, 3, fcab156.	3.3	22
44	Human Verbal Memory Encoding Is Hierarchically Distributed in a Continuous Processing Stream. ENeuro, 2019, 6, ENEURO.0214-18.2018.	1.9	21
45	A framework For brain atlases: Lessons from seizure dynamics. NeuroImage, 2022, 254, 118986.	4.2	20
46	Integrating Network Neuroscience Into Epilepsy Care: Progress, Barriers, and Next Steps. Epilepsy Currents, 2022, 22, 272-278.	0.8	20
47	Improved availability and quality of care with epilepsy nurse practitioners. Neurology: Clinical Practice, 2017, 7, 109-117.	1.6	19
48	Wheels Within Wheels: Theory and Practice of Epileptic Networks. Epilepsy Currents, 2021, 21, 243-247.	0.8	19
49	Unsupervised machine-learning classification of electrophysiologically active electrodes during human cognitive task performance. Scientific Reports, 2019, 9, 17390.	3.3	18
50	Pearls & Oy-sters: Bilateral globus pallidus lesions in a patient with COVID-19. Neurology, 2020, 95, 454-457.	1.1	18
51	The effect of increased intracranial EEG sampling rates in clinical practice. Clinical Neurophysiology, 2018, 129, 360-367.	1.5	17
52	The sensitivity of network statistics to incomplete electrode sampling on intracranial EEG. Network Neuroscience, 2020, 4, 484-506.	2.6	17
53	A Neurological Cause of Recurrent Choking During Sleep. Journal of Clinical Sleep Medicine, 2008, 04, 586-587.	2.6	16
54	The what and when of olfactory working memory in humans. Current Biology, 2021, 31, 4499-4511.e8.	3.9	15

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55	Hospital care for mental health and substance abuse in children with epilepsy. Epilepsy and Behavior, 2016, 57, 161-166.	1.7	14
56	Clinical validation of automated hippocampal segmentation in temporal lobe epilepsy. NeuroImage: Clinical, 2018, 20, 1139-1147.	2.7	14
57	Addressing barriers to surgical evaluation for patients with epilepsy. Epilepsy and Behavior, 2018, 86, 1-5.	1.7	12
58	Surgical Outcomes in Post-Traumatic Epilepsy: A Single Institutional Experience. Operative Neurosurgery, 2020, 18, 12-18.	0.8	11
59	Pairwise maximum entropy model explains the role of white matter structure in shaping emergent co-activation states. Communications Biology, 2021, 4, 210.	4.4	10
60	Association Between Anatomical Location of Surgically Induced Lesions and Postoperative Seizure Outcome in Temporal Lobe Epilepsy. Neurology, 2022, 98, .	1.1	9
61	Developing and Implementing a Standardized Ictal Examination in the Epilepsy Monitoring Unit. Neurology: Clinical Practice, 2021, 11, 127-133.	1.6	8
62	Quantitative [18]FDG PET asymmetry features predict long-term seizure recurrence in refractory epilepsy. Epilepsy and Behavior, 2021, 116, 107714.	1.7	8
63	Seizure Detection in Continuous Inpatient EEG. Neurology, 2022, 98, .	1.1	8
64	Efficacy and Tolerability of Clobazam in Adults With Drug-Refractory Epilepsy. Neurology: Clinical Practice, 2021, 11, e669-e676.	1.6	7
65	Direct Electrical Stimulation of the Human Brain Has Inverse Effects on the Theta and Gamma Neural Activities. IEEE Transactions on Biomedical Engineering, 2021, 68, 3701-3712.	4.2	7
66	Volumetric glutamate imaging (GluCEST) using 7T MRI can lateralize nonlesional temporal lobe epilepsy: A preliminary study. Brain and Behavior, 2021, 11, e02134.	2.2	7
67	Theta Synchrony Is Increased near Neural Populations That Are Active When Initiating Instructed Movement. ENeuro, 2021, 8, ENEURO.0252-20.2020.	1.9	7
68	Using Generalized Polyspike Train to Predict Drug-Resistant Idiopathic Generalized Epilepsy. Journal of Clinical Neurophysiology, 2020, Publish Ahead of Print, .	1.7	7
69	Neurophysiological Evidence for Cognitive Map Formation during Sequence Learning. ENeuro, 2022, 9, ENEURO.0361-21.2022.	1.9	6
70	Advanced structural multimodal imaging of a patient with subcortical band heterotopia. Epilepsia Open, 2016, 1, 152-155.	2.4	5
71	A Computationally Efficient Model for Predicting Successful Memory Encoding Using Machine-Learning-based EEG Channel Selection. , 2019, , .		5
72	Inconsistent reporting of drugâ€“drug interactions for hormonal contraception and antiepileptic drugs â€“ Implications for reproductive health for women with epilepsy. Epilepsy and Behavior, 2021, 114, 107626.	1.7	5

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73	A nationwide analysis of maternal morbidity and acute postpartum readmissions in women with epilepsy. Epilepsy and Behavior, 2021, 117, 107874.	1.7	5
74	7T Magnetic Resonance Imaging Quantification of Brain Glutamate in Acute Ischaemic Stroke. Journal of Stroke, 2021, 23, 281-284.	3.2	5
75	The refractory epilepsy screening tool for Lennoxâ€“Gastaut syndrome (REST-LGS). Epilepsy and Behavior, 2019, 90, 148-153.	1.7	4
76	Mapping Epileptogenic Tissues in MRI-Negative Focal Epilepsy. Neurology, 2021, 97, 754-755.	1.1	4
77	A neurological cause of recurrent choking during sleep. Journal of Clinical Sleep Medicine, 2008, 4, 586-7.	2.6	4
78	Postdiagnosis neurological care for patients with psychogenic nonepileptic spells (PNES). Epilepsy and Behavior, 2017, 74, 64-68.	1.7	3
79	Network Analyses in Epilepsy. Neurology, 2021, 96, 195-196.	1.1	3
80	Epilepsy Lesion Localization is not Predicted by Developmental Venous Anomaly Location or its FDGâ€PET Metabolic Activity. Journal of Neuroimaging, 2020, 30, 544-550.	2.0	2
81	Cortical disconnection in temporal lobe epilepsy. Epilepsy and Behavior, 2021, 123, 108231.	1.7	2
82	MON-110 Utilization of GluCEST, a Novel Neuroimaging Technique, to Characterize the Brain Phenotype in Hyperinsulinism/Hyperammonemia Syndrome. Journal of the Endocrine Society, 2020, 4, .	0.2	1
83	Population-Based Study of Nonelective Postpartum Readmissions in Women With Stroke, Migraine, Multiple Sclerosis, and Myasthenia Gravis. Neurology, 2022, 98, e1545-e1554.	1.1	1
84	Implanting intracranial electrodes does not affect spikes or network connectivity in nearby or connected brain regions. Network Neuroscience, 0, , 1-33.	2.6	1